

HEARING LOSS RESOURCE GUIDE

*for Families of Children
with Hearing Loss*



This project is supported in part by Project #H61 MC 00084 from the Maternal and Child Health Bureau (Title V, Social Security Act), Health Resources and Services Administration, Department of Health and Human Services.

TABLE OF CONTENTS

1. Introduction	1
2. Your child has a hearing loss	3
2.1 Feelings about your child's hearing loss	3
2.2 How can I be sure the diagnosis is correct?	3
2.3 What do we do today?	4
2.4 Does my child need hearing aids?	6
2.5 Will my child be able to talk?	6
2.6 What is early intervention?	6
3. Who can help?	9
4. Your child's hearing	13
4.1 How does the ear work?	13
4.2 How is my child's hearing tested?	15
4.3 About hearing loss	18
4.4 Your child's audiogram	23
4.5 Frequently asked questions about hearing loss	26
5. How will my child communicate?	27
5.1 How hearing loss affects communication	27
5.2 Will my child and family learn sign language?	28
5.3 Choosing a communication method	28
5.4 Communication methods	29
6. Hearing aids and amplification	33
6.1 Hearing aids	33
6.2 Cochlear implants, FM systems and other assistive listening devices	39

7. Your child's rights and your rights as a parent	43
7.1 The law and your rights	43
7.2 Your responsibilities as a parent	44
8. Resources	46
8.1 Contacting your Family Resource Coordinator	46
8.2 Early Intervention Programs that specialize in hearing loss	48
8.3 School for children with hearing loss	51
8.4 Websites	52
8.5 Audiologists who evaluate and treat infants and young children with hearing loss	58

INTRODUCTION

You may have just found out your child has a hearing loss. The period of time after the diagnosis of hearing loss can be highly emotional for parents. Keep in mind that as every child grows, they give a family unique opportunities and challenges. A child with hearing loss is no different. Much can be done to help your child communicate and be successful. Understanding your child's hearing loss and the options available will be very helpful to you as your child grows.

You likely have a lot of questions. This guide was designed to help you understand your child's hearing loss, and begin to explore the choices available for your child and family.

You will have to make many decisions about your child. There is no one "right" choice for everyone. You will need to decide what works best for your child and what the "right" decision is for your family. As your child grows, your needs will change. You may decide to make other choices later on. Take time to learn about all of your options.

Some of the information in this guide may be helpful now, and some of it will be helpful later. If you have questions about topics covered in this guide, please ask your child's audiologist or doctor.

YOUR CHILD HAS A HEARING LOSS

Feelings About Your Child's Hearing Loss

For some parents, hearing their child has hearing loss confirms what they already suspected. For many parents, hearing the audiologist say “your child has a hearing loss” comes as a shock. Some parents have a very easy time accepting a diagnosis of hearing loss. Other parents have a hard time accepting it, sometimes for a long period of time. Whatever your reaction is, you can be sure it is normal. There is no right or wrong way to react. Most families have not had any experience with hearing loss.

As you adjust to knowing your child has a hearing loss, you will find there are many decisions to make. You may need to make important decisions while still feeling overwhelmed. You may be confused or unsure about what is best for your child.

Know that parents make decisions based on the information they have at the time. Most decisions do not need to be made right away. There are many specialists who are experienced in working with families that are similar to yours. They can help you address current and future concerns. Last, you will need to decide what works best for your child and your family, and be prepared to make or change decisions as your child develops and his or her needs change.

How Can I be Sure the Diagnosis is Correct?

Because of newborn hearing screening, infants are now diagnosed with hearing loss at a very young age. Hearing loss is often not obvious in young infants, and can be confusing to many parents. You may have friends or family members that question whether your child really has a hearing loss. They may even try some “home hearing tests” to prove that your child hears. It is very difficult to tell how well a very young child is hearing just by observation. At such a young age, your child cannot simply tell you what he does or doesn't hear clearly. It sure would be helpful if he could!

The hearing tests used to diagnose hearing loss are very accurate when they are performed by an experienced pediatric audiologist. Your child will also have more hearing tests in the future. These tests will provide more information about your child's hearing loss. If you are concerned that your child has not had an accurate or complete hearing evaluation, read section 4 of this guide. It will help you evaluate the testing your child has had.

At the end of section 8 of this guide you will find a list of pediatric audiologists that specialize in testing and treating infants and young children with hearing loss. All of the audiologists on this list have indicated that they meet the Washington State Best Practice Guidelines for Diagnostic Audiologic Follow-up to Newborn Hearing Screening.

What Do We Do Today?

The first few weeks and months after you have learned about your child's hearing loss can be a busy and overwhelming time. Here are some ideas to help you:

INTERACT AND COMMUNICATE WITH YOUR CHILD.

Some parents find that talking to their child feels "different" because they aren't sure how much their child is hearing. You don't have to wait to start working on communication. Communicate with your baby as you normally would.

- Use a natural voice.
- Babies respond to the special intonation patterns and facial expressions we reserve just for them.
- Lots of eye contact, touch, hugs and kisses help babies learn how to interact.
- Face-to-face conversations are good for all babies, but especially for babies with hearing loss.
- Your child needs to watch your mouth move, and watch your facial expressions.
- Be sure to stay close and face-to-face when communicating with your child.

Babies learn from the routines you have and things you do and say in everyday life. Your child will benefit from your communication as you do tasks such as change a

diaper, give a bath, and feed your child. Your child will also learn when you sing songs, do finger plays, and play games like peek-a-boo.

SEEK SUPPORT FROM FAMILY AND FRIENDS.

People that are close to you can be a great support. Your friends and family may share your feelings and opinions about what is best for your child. They may also have differences. Invite the support people in your child's life to participate in visits to the audiologist, early intervention visits, and parent group meetings.

KEEP A JOURNAL AND NOTEBOOK FOR YOUR CHILD.

A journal is a place where you can write down important things about your child.

- Write down sounds that your child responds to or new vocalizations your child makes. As your child changes and grows, you will be able to see how far she has come!
- Write down questions to ask professionals when you meet with them.
- Write about the feelings and experiences you are having.
- A notebook such as the one that holds this guide is a great place for keeping copies of clinical reports and important forms about your child. When you go to appointments, it will be easy to show others results or have them make copies if needed.

START LEARNING ABOUT COMMUNICATION OPTIONS AVAILABLE FOR YOUR CHILD.

There are many different methods for communication available to children with hearing loss and their families. Section 5 of this guide will give you an introduction to the options available.

CONTACT THE LEAD FAMILY RESOURCES COORDINATOR (FRC) FOR YOUR COUNTY.

This person can help you get funding for hearing aids and other services. Information about how to contact your FRC can be found in section 8 of this guide.

Does My Child Need Hearing Aids?

Hearing loss greatly decreases the amount of sound your child's ears and brain receive. If your child is not able to hear speech, then he will have difficulty learning spoken language.

- An infant can be fit with hearing aids at any age.
- If the communication method you choose requires your child to wear hearing aids, the sooner you get hearing aids the sooner your child can begin hearing important speech sounds.
- Some parents may choose a communication method that uses only sign language, and does not require the use of hearing aids.

Will My Child be Able to Talk?

This is a difficult question to answer. It can depend on the severity of your child's hearing loss, how well your child is able to use his residual (remaining) hearing, and other factors.

- Children with more severe hearing losses will have more difficulty learning to talk. They may need to use some form of sign language, in addition to hearing aids and speech therapy, to help them communicate.
- Many children with mild and moderate losses learn to talk well with the help of hearing aids and speech therapy.

What is Early Intervention?

Early Intervention programs are for children from birth to three and their families. These programs provide specialists that have training in working with young children with hearing loss.

- When you enroll in an Early Intervention program, you will be assigned a parent infant specialist who works with you and your child.
- You may also have the option to participate in play groups, parent meetings, and sign language classes.

- You may live in a community that has one program or several programs to choose from. Often, programs have different philosophies about how to communicate with children with hearing loss.

Section 5 of this guide provides information about the different philosophies of communication. Section 8 of this guide lists Early Intervention programs that specialize in working with children with hearing loss.

WHO CAN HELP?

You will meet many professionals and other people who can help you and your child. This section briefly describes who may be a part of your family's care team, and how each of them can help.

Audiologist

- Has the proper training and equipment to test hearing. **PEDIATRIC AUDIOLOGISTS** specialize in working with infants and young children.
- Obtains detailed information about your child's hearing.
- Recommends and fits amplification (hearing aids, FM systems, cochlear implants).
- Keeps your child equipped with proper fitting earmolds.
- Adjusts your child's hearing aids when needed.
- Works with you to assess how well your child responds to sounds at home.
- Provides information about early intervention options for your family.
- Works with you and your early intervention specialist to maintain your child's amplification.

Aural Rehabilitation Specialist

- Develops your child's listening skills to help your child learn speech and language.

Counselor/Therapist

- Gives emotional support for children and families.
- Helps you or your family with emotional issues surrounding your child's hearing loss.

Early Intervention Specialist for Deaf and Hard of Hearing (D/HH) Infants & Toddlers

- Works with families of children birth to 3 with communication and learning needs.
- Provides you and your child with individualized and family-centered services that will help your child learn communication and language skills.
- Helps assess your child's and family's strengths and needs.
- Helps answer questions about how your child's hearing loss affects communication, learning, and participation in school and society.
- Talks with you about your observations and concerns about your child.
- Works with your child's audiologist to help you learn to use your child's amplification. Also helps make sure your child's hearing aids are working well.
- Keeps records of your child's progress in communication and development.
- Gives you support during difficult times.
- Gives you opportunities to network with other adults and children with hearing loss.
- Helps define your child's educational needs when your child is ready to "graduate" from early intervention.

Family Resource Coordinator (FRC)

- Helps families with children birth to 3 access services they need.
- Helps families with children birth to 3 find resources to pay for services.

Medical Geneticist/Genetics Counselor

- Determines if there is a genetic cause for your child's hearing loss.
- Provides counseling to families about the implications of a genetic hearing loss.

Otologist, Otolaryngologist or Ear, Nose, & Throat (ENT) Doctor

- Makes sure there is not a treatable condition in your child's outer or middle ear that is causing the hearing loss.
- Explains and talks with you about possible medical or surgical treatments for hearing loss, including cochlear implants.

- Diagnoses and treats ear infections and other medical problems that can affect your child's hearing.
- Gives approval or "medical clearance" for your child to wear hearing aids.
- Schedules other tests to find out more about the causes of your child's hearing loss.

Pediatrician or Family Practitioner

- Refers you to an audiologist who works with infants and young children.
- Answers questions you may have about medical treatment of your child's hearing loss.
- Helps you access early intervention services.
- Treats your child or refers to ear specialists for middle ear problems, such as ear infections, that can affect your child's hearing.

Speech Language Pathologist

- Provides speech and language therapy to help make your child's speech more understandable.
- Evaluates your child's speech and language skills.

Other Parents of Deaf and Hard of Hearing Children

- Share experiences they have had.
- Tell you about helpful people and resources they have found.
- Listen to you.
- Share their feelings about parenting a child with hearing loss.
- Tell you about their child's achievements.
- Meet with you so your children can play together.

Deaf and Hard of Hearing Adults

- Share personal experiences about being deaf or hard of hearing.
- Share educational, social and cultural perspectives.
- Show you different methods of communication.
- Act as a role model for your child.
- Provide encouragement for your family in meeting challenges and raising a successful child.

YOUR CHILD'S HEARING

You likely have many questions about your child's hearing, and what your child's hearing loss means. This section covers:

- How the ear works.
- How your child's hearing is tested.
- Types and degrees of hearing loss.
- The audiogram.
- Frequently asked questions about hearing loss.

How Does the Ear Work?

PARTS OF THE EAR

There are three parts to the ear – the external ear, the middle ear, and the inner ear. Each of the three main parts has several smaller parts.

OUTER EAR:

- Pinna (the part we see).
- Ear canal (external auditory meatus).

MIDDLE EAR:

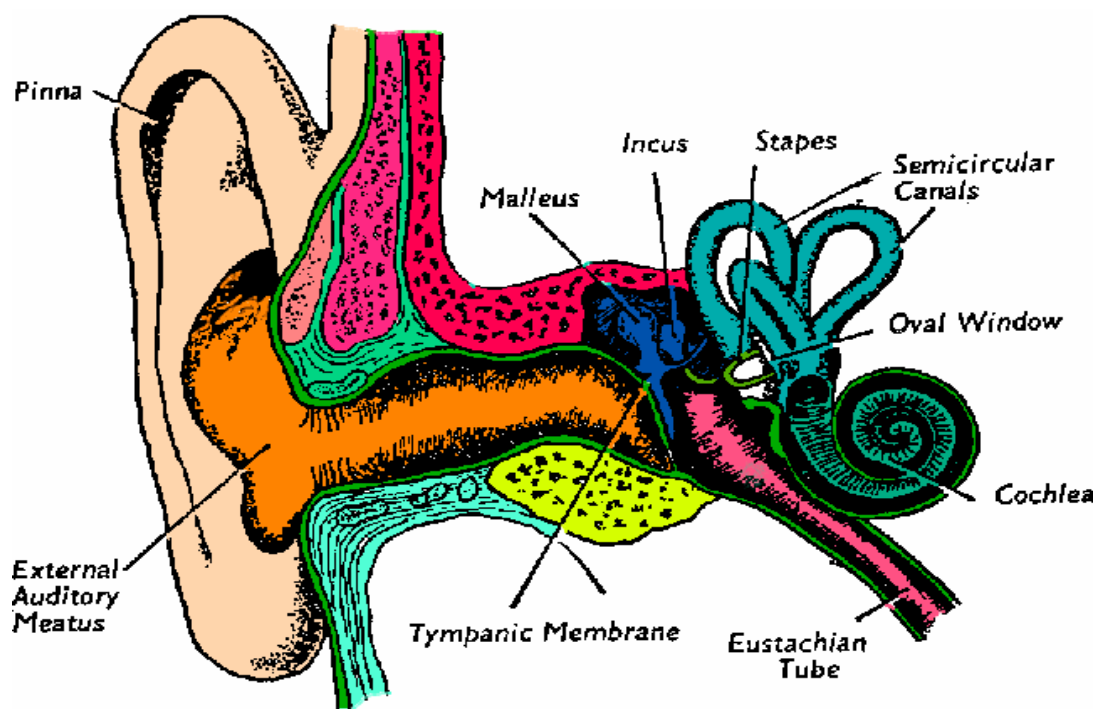
- Tympanic membrane (eardrum).
- The ossicles (malleus, incus, stapes; also referred to as the hammer, anvil, and stirrup).
- Eustachian tube.

INNER EAR:

- Vestibular system (used for balance).
- Vestibular (balance) nerve.
- Cochlea.
- Auditory (hearing) nerve.

HOW DOES MY CHILD HEAR SOUND?

- Sound comes into the ear and travels down the ear canal to the eardrum (tympanic membrane). This is where it reaches the middle ear.
- The sound causes the tympanic membrane to vibrate, which causes the three middle ear bones (ossicles) to move.
- The movement of the ossicles causes pressure changes in the fluid of the inner ear, or cochlea.
- These pressure changes cause a structure in the inner ear, called the basilar membrane, to stimulate cochlear hair cells.
- The movement of the cochlear hair cells sends the signal through the auditory (hearing) nerve to the brain.



The structure of the Ear.

How is My Child's Hearing Tested?

There are many ways to test your child's hearing. The kind of test your child has depends on your child's needs and abilities.

- **OBJECTIVE HEARING TESTS** are done while your child is sleeping or resting quietly. They don't require your child to respond to sound.
- **BEHAVIORAL HEARING TESTS** require your child to respond to sound. Your child will respond by turning his head, playing a simple game, or raising his hand.

Your child may be tested using air conduction, bone conduction, or both.

- **AIR CONDUCTION** tests the entire auditory system, including the outer ear, middle ear, inner ear and to the brain. Your child hears sounds through earphones or speakers.
- **BONE CONDUCTION** is where sound vibrations travel through the skull to the inner ear and to the brain. It bypasses the outer ear and middle ear and only tests the inner ear to the brain. Sounds are presented to your child with a bone oscillator (small vibrator) that is placed on the bone behind the ear.
- Using both air conduction and bone conduction helps the audiologist determine the location of your child's hearing loss.

Objective Hearing Tests

BAER TEST (PRONOUNCED LIKE BEAR)

- BAER stands for Brainstem Auditory Evoked Response. You may also see this test called ABR, BER, or AABR.
- This test measures how well your child's hearing nerve responds to sound.
- It is used for infants and young children who are too young to respond to sounds by turning their heads. It may also be used for older children who can't do behavioral hearing tests. Sometimes a BAER test is used to confirm the results of a behavioral hearing test.
- The steps for a BAER test are:

1. Your child must be asleep. If your child is tested before 6 months of age, the test is done while he or she sleeps naturally. Children over 6 months of age usually fall asleep with a mild sedative prescribed by a doctor.
2. Your child's skin is cleaned and sensors are put on his forehead and behind each ear.
3. Sounds are played into each ear through a soft rubber earphone.
4. A computer records the response of your child's hearing nerve.
5. Your child's audiologist looks for the softest sound your child's hearing nerve responds to.

EOAE TEST

- EOAE stands for Evoked Otoacoustic Emissions. You may also see this test called OAE, TEOAE, or DPOAE.
- This test measures how well your child's cochlea, or inner ear, works.
- It is usually done during the same visit as a BAER test.
- Your child needs to be still and very quiet for this test.
- The steps for an EOAE test are:
 1. A soft rubber earphone is placed in each of your child's ears.
 2. Sounds are played through the earphones.
 3. A computer measures the response of your child's inner ear.
 4. The audiologist evaluates the response.

TYMPANOMETRY TEST

- This test helps the audiologist find out how well your child's middle ear is working.
- The steps for a tympanometry test are:
 1. The audiologist puts a rubber tip in your child's ear.
 2. The tip is connected to a machine that changes the air pressure in your child's ear. The machine prints out a graph.

3. The graph gives information about whether there is fluid in the middle ear, or if the eardrum is not moving well. This test can be done at any age, but works best when your child is at least 6 months old.

Behavioral Hearing Tests

Your child must be at least 6 to 7 months developmental age to do a behavioral hearing test. She needs to be able to sit up by herself and have good head control.

VISUAL REINFORCEMENT AUDIOMETRY (VRA)

- This test is done in a soundproof room, called a sound booth. The test requires your child to turn her head in response to the sounds she hears.
- Your child sits on your lap in the middle of the room.
- A helper sits in front of you and your child. This helper keeps your child's attention forward using toys.
- On each side of your child are darkened boxes. These boxes contain toys that the audiologist can light up when your child responds to the sounds he hears.
- Your child will hear sounds through a speaker or earphones.
- The audiologist teaches your child to turn her head towards the sound she hears by reinforcing her response with the toys in the light boxes.
- The audiologist finds the softest sounds your child responds to.

CONDITIONED PLAY AUDIOMETRY (CPA)

- Conditioned play audiometry is usually used for children who are 3 years and older.
- Your child will sit on your lap or a chair in a sound proof room, called a sound booth.
- Your child will hear sounds through a speaker or earphones.
- The audiologist will teach your child to play a simple game, such as putting a block in a bucket or a peg in a board each time he hears the sound.
- The audiologist will find the softest sounds your child responds to.

SPEECH AWARENESS THRESHOLD (SAT)

- This test measures your child's awareness to speech.
- It is helpful because some very young children respond to speech before they respond to pure tones.
- The audiologist will present speech sounds to your child through a speaker or earphones.
- The audiologist will find the softest level of speech that your child responds to.

SPEECH RECEPTION THRESHOLD (SRT)

- This test measures your child's ability to recognize words.
- Your child must know the names of some common objects to be able to do this test.
- The audiologist will present words to your child through a speaker or earphones.
- The audiologist will ask your child to repeat the words he hears, or to point to pictures of the objects.
- The audiologist will find the softest level at which your child can hear the words.

How Often Will My Child's Hearing be Tested?

Your child's hearing will be tested on a schedule determined by your audiologist. These tests will make sure that his hearing has not changed. Your child may also have hearing tests while wearing his hearing aids.

About Hearing Loss

WHAT IS HEARING LOSS?

Hearing loss is the inability to detect sound. Many people try to describe hearing loss as a percentage. This is not the most accurate way to describe it. It is better to describe it by the type and the degree of hearing loss.

TYPES OF HEARING LOSS

The type of hearing loss depends on where it occurs in the ear. Your child's hearing loss can be described as conductive, sensorineural, or mixed.

- **CONDUCTIVE HEARING LOSS** means there are problems with the outer or middle parts of the ear. Most times, there is something in the middle or outer ear that blocks the sound from passing through the structures. Medicine or surgery can sometimes help this type of hearing loss.
- **SENSORINEURAL HEARING LOSS** means there is a problem with the cochlea (inner ear) or the auditory nerve. Most times this type of hearing loss is permanent. It is not usually fixed by medicine or surgery. Hearing aids are often helpful.
- **MIXED HEARING LOSS** means there is a problem in both the outer or middle ear and the inner ear.

Your child's hearing loss can also be described as unilateral or bilateral.

- **UNILATERAL** means the hearing loss is in just one ear.
- **BILATERAL** means the hearing loss is in both ears.

DEGREES OF HEARING LOSS

The severity of hearing loss is measured in degrees. There are four degrees of hearing loss. Degrees of hearing loss are measured in decibels (dB). Decibels refer to the intensity, or loudness of the sound. The larger the number is, the louder the sound.

MILD HEARING LOSS:	Sounds softer than 25-40 dB are not detected.
MODERATE HEARING LOSS:	Sounds softer than 40-65 dB are not detected.
SEVERE HEARING LOSS:	Sounds softer than 65-90 dB are not detected.
PROFOUND HEARING LOSS:	Sounds softer than 90 dB are not detected.

Your child's hearing loss may not fall into just one of these categories. For instance, it could be called mild to moderate, or severe to profound. The chart on page 21 shows the impact different degrees of hearing loss can have for your child in learning spoken language. Keep in mind that the same hearing loss can affect children in different ways.

TERMS USED FOR HEARING LOSS

Many people confuse the terms hearing impaired, hard of hearing, deaf, and Deaf.

- **hearing impaired** is used for a child with any degree of hearing loss. (Many people don't like this term and prefer to use the term hard of hearing.)
- **hard of hearing** is used if a child has a mild to severe degree of hearing loss.
- **deaf** (little or lower case d) is used if a child has a profound or severe to profound degree of hearing loss. If you see the word deaf spelled with a little or lower case d, it means "audiologically deaf."
- **Deaf** (capital or upper case D) is used by the Deaf Community to mean "culturally Deaf." A person can have any degree of hearing loss to be a member of the Deaf Community. Members of the Deaf Community communicate using sign language, and have a culture that they identify as their own. They may or may not be audilogically deaf.

Degree of Hearing Loss	What it Means	Without Amplification and Early Intervention	With Amplification and Early Intervention
Mild	The softest sounds a child hears are at levels of 25 dB-40 dB. Softer sounds than these are not detected.	<ul style="list-style-type: none"> – Soft sounds such as a faucet dripping, birds chirping, and some speech sounds may not be heard. – Sounds that are moderately loud to a normal hearing person, such as speech, will be soft. – A child will have trouble hearing faint or distant speech, and may have trouble hearing in a noisy environment. 	<ul style="list-style-type: none"> – Most children can recognize and understand soft sounds of speech and the world around them.
Moderate	The softest sounds a child hears are at levels of 40 dB - 65 dB. Softer sounds than these are not detected.	<ul style="list-style-type: none"> – Most speech sounds, and louder sounds such as a clock ticking, or a vacuum cleaner may not be heard. – Sounds that are loud to a normal hearing person will be soft. – Speech can only be understood if it is loud. – A child may have limitations in vocabulary, language comprehension and language usage. – A child may have errors in his speech. 	<ul style="list-style-type: none"> – Most children can recognize and understand soft sounds of speech and the world around them. – Most children develop age-appropriate vocabulary, language comprehension and language usage. – Most children learn to monitor their own speech production and to speak clearly.

Degree of Hearing Loss	What it Means	Without Amplification and Early Intervention	With Amplification and Early Intervention
Severe	The softest sounds a child hears are at levels of 65 dB – 90 dB. Softer sounds than these are not detected.	<ul style="list-style-type: none"> – Most speech sounds will not be understood, and other loud sounds such as a phone ringing or a dog barking may be missed. – Sounds that are very loud to a normal hearing person will be very soft. – Speech will only be heard if it is shouted in the ear. – Spoken language comprehension and speech will not develop spontaneously. – A child with severe hearing loss will have mostly unintelligible speech. 	<ul style="list-style-type: none"> – The majority of children can detect and understand most sounds. – Most children can learn to understand and use spoken conversation, even though they will not hear speech the way normal hearing people do. – Most children will need special accommodations, especially in school, to compensate for the challenges that distance and background noise present.
Profound or Severe-Profound	<p>The softest sounds a child hears are at levels of 90 dB or more. Softer sounds than these are not detected.</p> <p>A child with a profound or severe-profound hearing loss may be called deaf.</p>	<ul style="list-style-type: none"> – Very loud sounds such as an airplane flying overhead or a lawnmower will not be detected. – A child will rely on vision rather than hearing for primary communication. – A child will have unintelligible speech. 	<ul style="list-style-type: none"> – Many children can detect moderately loud sounds and spoken conversation under ideal listening conditions (no background noise and facing the speaker). – Many children still need visual communication to assist them in understanding spoken conversation. – Most children will need special accommodations, especially in school, to compensate for the challenges that distance and background noise present. – Many children can develop age-appropriate language comprehension and language usage.

Your Child's Audiogram

WHAT IS AN AUDIOGRAM?

An audiogram is a graph of the softest sounds your child hears. A few tips will help you understand the graph:

Across the top of the graph are the frequencies, or pitches.

- The frequencies are organized like a piano keyboard. The low tones are on the left and the high tones are on the right.
- An example of a low pitch is a drum and an example of a high pitch is a bird chirp.
- These pitches or frequencies are measured in Hertz (Hz).

Down the side of the graph is the intensity, or loudness of sounds.

- The sounds at the top of the graph are soft.
- The sounds at the bottom of the graph are loud.
- Loudness is measured in decibels (dB).

The marks on your child's audiogram represent the softest sounds your child responded to during the hearing test.

If your child wore earphones during the test, you will find **X**'s and **O**'s on the graph.

X = left ear

O = right ear

If your child did not wear earphones during the test, you will find **S**'s on the audiogram.

S means your child was tested using speakers.

When using speakers, only your child's better ear is tested.

^ or **m** means your child was tested using bone conduction.

A means your child was tested with hearing aids.

WHAT DOES MY CHILD'S AUDIOGRAM TELL ME?

Your audiologist will be able to explain your child's audiogram in full detail. Your child's audiogram can answer these questions:

- Is the hearing the same in both ears, or is it different?
- How much hearing loss does your child have? (degree of hearing loss)
- Is there more hearing loss in some frequencies (pitches) than others?
- Is there a difference in air conduction and bone conduction hearing? (air-bone gap)
- How well does your child hear with hearing aids?

The audiogram on the next page has pictures that represent what sounds might be heard at different frequencies or pitches, and at different intensities, or loudness.

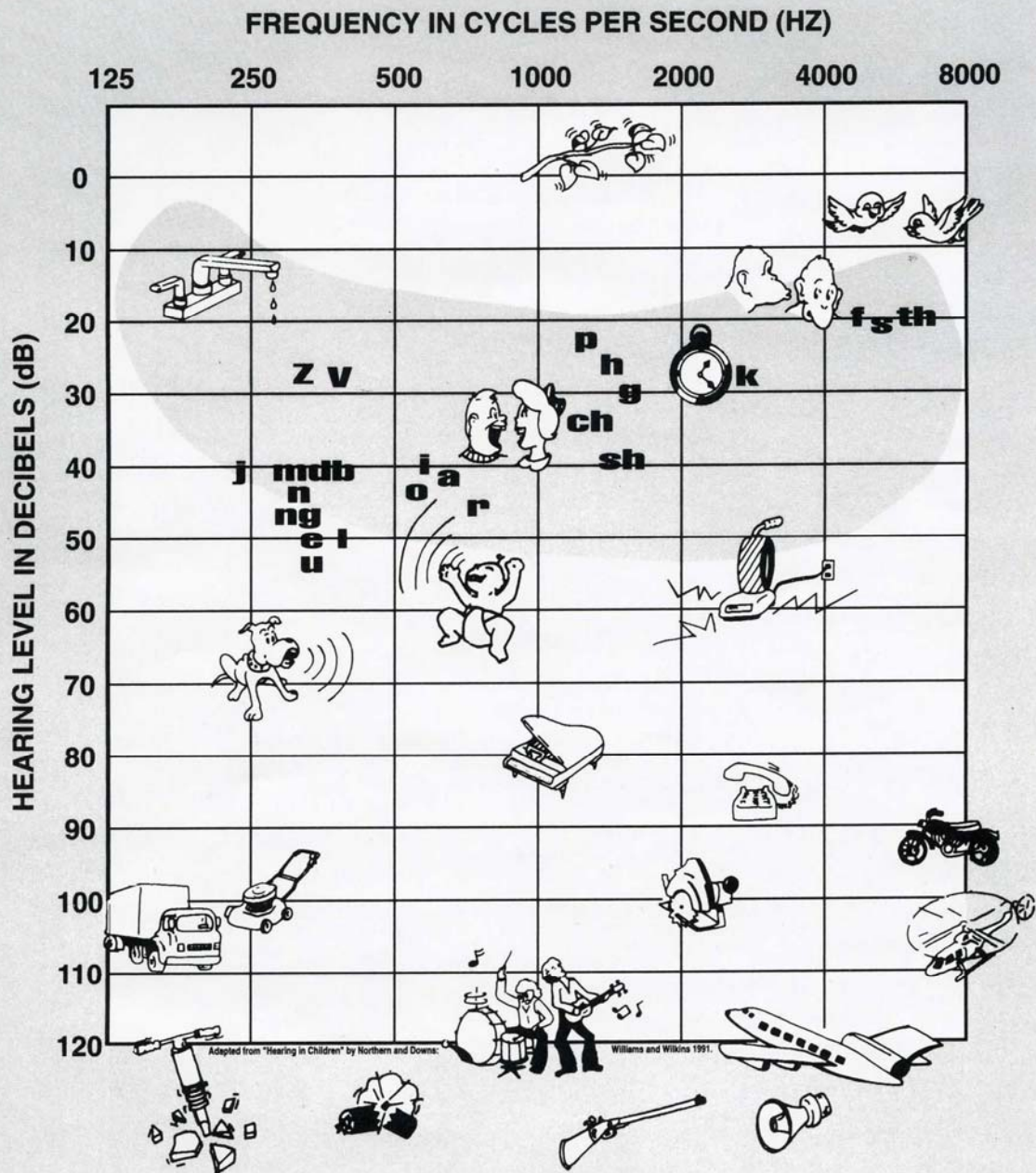
- The gray shaded area is called the “speech banana.”
- The speech banana shows where the different sounds of speech fall on the audiogram.
- Even a mild hearing loss will affect your child’s ability to learn speech and language.

CONFIGURATION OF YOUR CHILD’S HEARING LOSS

Your child’s hearing loss will most likely not look like a straight line. Your child’s hearing will vary at different pitches. Some examples of typical hearing losses include

- Sloping hearing loss -- Your child’s hearing is better in the lower frequencies.
- Reverse sloping hearing loss -- Your child’s hearing is better in the higher frequencies.
- Precipitously sloping hearing loss (steep and rapid slope) -- Your child’s hearing drops off dramatically in the high frequencies.
- Cookie bite -- Your child hears better in the lower and higher frequencies, and worse in the mid frequencies.

AUDIOGRAM OF FAMILIAR SOUNDS



AMERICAN
ACADEMY OF
AUDIOLOGY



<http://www.audiology.org>

11730 Plaza America Dr., Ste. 300, Reston VA 20190 • 703-790-8466 • 800-AAA-2336 • Fax: 703-790-8631

The "Audiogram of Familiar Sounds" is used with permission from the American Academy of Audiology – www.audiology.org.

Frequently Asked Questions About Hearing Loss

WHAT PERCENTAGE OF HEARING LOSS DOES MY CHILD HAVE?

Hearing loss is difficult to describe in terms of percentage. Because hearing loss can range greatly between frequencies, it is usually defined in terms of the type and degree of hearing loss, and the configuration of hearing loss. If someone refers to your child's hearing loss as a percentage, talk to your audiologist for a better description.

WILL MY CHILD'S HEARING LOSS GET BETTER OR WORSE?

This is difficult to determine. If your child has a conductive loss, it can sometimes get better. If your child has a sensorineural hearing loss, it will probably not get better. Some hearing losses can get worse over time. These are called PROGRESSIVE HEARING LOSSES. Checking your child's hearing on a regular basis helps to make sure that her hearing is not getting worse, and that she is getting appropriate amplification. Your ENT doctor or pediatrician may be able to give you more information about the chances of your child's hearing loss getting worse over time.

WHAT CAUSED MY CHILD'S HEARING LOSS?

Over 50% of infants born with hearing loss have no known risk factors for hearing loss. Some of the more common reasons for hearing loss are:

- Family history of hearing loss.
- A syndrome that is known to have hearing loss.
- Craniofacial abnormalities, such as a cleft lip or palate, ear pits, or ear tags.
- Certain infections in the mother during pregnancy such as CMV (cytomegalovirus), toxoplasmosis, herpes and rubella
- Admission to a neonatal intensive care unit for more than 48 hours.
- Bacterial meningitis.
- Repeat ear infections.

These are just some of the most common risk factors for hearing loss. Your audiologist or doctor can give you more information about other risk factors and causes of hearing loss.

HOW WILL MY CHILD COMMUNICATE?

Helping your child and family communicate is extremely important. You will find a lot of information and many opinions about what is best for your child. This section will give you the information you need to begin to learn about the options for your child and family. There are many approaches to communication. **The method you choose should provide your child with full access to communication. It should also use the primary language that is spoken in your home (such as English, Spanish, American Sign Language, etc.).** Your family will need to commit to using the method you choose. When choosing a method, keep in mind that no method is best for all children. You can always make a different decision later if your child's needs change.

How Hearing Loss Affects Communication

Hearing loss in a young child is different than hearing loss in an adult. This is because a child has not yet learned speech and language. Adults with hearing loss already know the rules of language and can apply them to daily conversations. For a child of parents who use spoken language in the home, even a mild hearing loss can affect his ability to develop speech and language. Children need to hear all of the sounds of their language to learn how to talk. Similarly, a child of Deaf parents who use sign language to communicate will learn language through being exposed to sign language.

When spoken language is used in the home, a child with hearing loss will be affected in terms of his access to communication. How much the hearing loss affects access for your child depends on factors such as:

- The type of hearing loss.
- The degree of hearing loss.
- The configuration of the hearing loss.
- Your family's involvement in your child's communication development.
- The age at which your child's hearing loss occurred.
- The age at which your child's hearing loss was identified.

- The age at which intervention was started, how much was provided, and the quality of the intervention provided.
- Other health conditions your child may have.

Will My Child and Family Learn Sign Language?

- Children with severe to profound hearing loss often need to learn some form of sign language. Even with a hearing aid, they may not be able to hear all the sounds of speech. This does not mean that children with severe to profound hearing loss will never learn to talk. What it means is that they may need to get speech and language information in ways other than just through hearing.
- Children with milder degrees of hearing loss may also benefit from knowing some form of sign language. There may be times such as swimming or bathing, when your child is not wearing hearing aids, but needs to communicate.
- Some families, especially those with at least one Deaf parent, may choose to use sign language as the main communication mode for their child.

Choosing a Communication Method

Communicating with your child is important. Responding to your child and encouraging her to respond to you is the key to your child's language development. There are many ways for children with hearing loss and their families to communicate. Every method requires a commitment from your family to help your child learn language.

One of the hardest decisions you will face is choosing a communication method for your child. Many people may tell you their method is best. Keep in mind that no method is best for all children. For some children, a combination of methods may be best. Also keep in mind that any decision you make can be changed later if your child is not progressing as you think she should. Here are some things to think about as you choose a communication method:

- Decisions should be based on your own observations about the needs of your child and family.

- Ask questions. Talk to adults who are deaf and hard of hearing and to other families with children who have a hearing loss.
- Talk about, read, and obtain as much information as you can about your choices.
- Watch your child's progress and re-evaluate your choice from time to time. You can change your decision later if the method you chose isn't working as well as you think it should.

The method(s) you choose should allow your child to:

- Communicate with the entire family (siblings, grandparents, aunt, uncles, cousins).
- Have a relationship with all family members.
- Enjoy meaningful conversations.
- Feel part of the family.
- Know what is going on.
- Have control over the environment.
- Express feelings.
- Join in the world of imagination and play.

Communication Methods

The next few pages briefly describe some of the communication methods to explore before making your decision. Your Audiologist or Family Resources Coordinator (FRC) can provide more information about early intervention programs that may be available for each method. Use this information as a starting point.

AUDITORY/ORAL:

- The auditory/oral approach uses your child's aided hearing and lip reading to teach spoken language.
- Lip reading means your child uses both hearing and sight to help him understand spoken language.
- Your child must wear amplification (hearing aids or a cochlear implant) to learn language in this way.
- Families learn how to communicate with their child using spoken language.
- This approach does not use sign language.

AUDITORY/VERBAL:

- The auditory/verbal approach is similar to the auditory/oral approach, except it does not use lip reading.
- Your child is taught to use his hearing and listening skills without relying on visual cues.
- Your child must use amplification (hearing aids or cochlear implant) with this approach.
- Families learn how to communicate with their child using spoken language.
- This approach does not use sign language.

BILINGUAL/BICULTURAL (AMERICAN SIGN LANGUAGE):

- The bilingual/bicultural method focuses on teaching your child American Sign Language (ASL).
- ASL uses the body, face and hands to communicate language.
- ASL is a separate language from English. It does not follow the same sentence structure as English.
- English is taught as a second language.
- Your child does not have to wear amplification to communicate this way.

- The Deaf community uses this method of communication.
- Members of the Deaf community have a strong cultural identity of their own.

CUED SPEECH:

- Cued speech uses eight hand shapes near the mouth that represent different sounds in spoken language.
- The hand shapes represent sounds that are hard to tell apart from each other with just lip reading.
- The hand shapes, combined with lip reading, give your child visual access to spoken language.
- Amplification is not required, though it is recommended.
- Families learn to communicate with their child using hand cues while speaking.

SIMULTANEOUS COMMUNICATION:

- This method involves speaking and signing the same words at the same time.
- Amplification is recommended, but not required for this method.
- The family learns a sign language system, such as Signing Exact English (SEE). SEE is designed to be used together with speech to help your child understand and use language.
- Signing Exact English is different than ASL. SEE follows spoken English exactly.
- The goal of this method is to develop your child's language, listening, and speech skills.
- Families learn to communicate with their child using the primary language of the home (English, Spanish, Russian, etc.). Families combine signed and spoken language at the same time.

TOTAL COMMUNICATION:

- The total communication approach combines methods.
- Families learn how to use spoken language and some form of sign language, gestures, facial expressions, finger spelling and pantomime to communicate.
- Signs and speech are usually used together. Sometimes they are used separately.
- Your child does not have to use amplification to communicate this way.
- Families learn to communicate with their child using a combination of signed and spoken language.

HEARING AIDS & AMPLIFICATION

This section provides information about hearing aids, cochlear implants, FM systems, and other assistive listening devices. Your audiologist will be able to give you more information about any of these topics if you have questions.

Hearing Aids

HOW DO HEARING AIDS WORK?

- Hearing aids for young children rest behind the ear. They attach to an earmold that fits inside the ear canal.
- An earmold is a small piece of soft plastic that is custom made for your child's ear. It helps hold the hearing aid in place.
- The hearing aid is adjusted by the audiologist to fit your child's hearing loss.
- Hearing aids pick up sound through a microphone and amplify it, or make it louder.
- The sound is sent through a tube in the earmold into your child's ear.

HOW CAN A HEARING AID HELP MY CHILD?

- Hearing aids make all sounds in the environment louder. This includes speech and other sounds, such as the television, the doorbell, vacuum, etc.
- Hearing aids can help improve speech and language development for your child.
- They can help improve your child's interactions with family and peers.

WHAT CAN'T A HEARING AID DO?

- A hearing aid cannot cure your child's hearing loss.
- It cannot help your child hear sounds at frequencies where she has no hearing.

- It cannot make only speech sounds louder. Hearing aids make all sounds louder, including background noise.
- It cannot make sounds clear if they are distorted by the cochlea.

WHAT ARE SOME DIFFERENT KINDS OF HEARING AIDS?

There are many hearing aid styles. Your audiologist will help you select the best hearing aid for your child.

- Small children are usually fit with **BEHIND THE EAR, OR BTE** hearing aids.
- Smaller, **IN THE EAR (ITE)** hearing aids are not recommended for small children.
- Some children with conductive hearing losses, who cannot wear a traditional hearing aid, may be fit with a **BONE CONDUCTION HEARING AID**.

REASONS SMALL CHILDREN ARE FIT WITH BTE HEARING AIDS:

- Earmolds for BTE aids are made from soft materials. They are more comfortable for children. They are also less easily broken, especially for active children.
- Earmolds for BTE aids can be replaced as your child grows. The hearing aid itself will not need to be recased as your child grows.
- BTE aids are often more reliable and less easily damaged.
- BTE aids can easily be connected to an FM system or other assistive listening device.
- BTE aids and earmolds come in many fun colors for children. They also come with accessories specially designed for children.
- Tamper-resistant battery doors can be put on BTE aids. This is important because hearing aid batteries can be toxic to children if swallowed.
- Volume control covers can be put on BTE aids. This helps make sure the volume is not accidentally changed.

Hearing Aid Technology

There are also several kinds of technology for hearing aids. Types of hearing aids are:

Conventional hearing aids:

- Increase sound electronically.
- Your audiologist adjusts them by adjusting external screw controls.

Programmable hearing aids:

- Increase sound electronically.
- Your audiologist adjusts them by programming an internal microchip.
- Might have several channels or programs for different hearing environments.
- Might come with a remote control to adjust the settings.

Digital hearing aids:

- Increase sound digitally.
- Your audiologist adjusts them using a computer.
- The hearing aid program can be customized to fit your child's hearing loss.
- Processes noise and speech in a way that may help your child understand speech better.
- Offer increased flexibility to accommodate changes in your child's hearing over time.

Bone conduction hearing aids:

- Bone conduction hearing aids are used by some children with conductive hearing losses that cannot be medically or surgically corrected. Often, these children cannot wear a behind-the-ear (BTE) hearing aid.
- These hearing aids transmit sound via a bone oscillator (vibrator) that sits on the bone behind the ear.

What are Some Important Features of Hearing Aids for Infants and Toddlers?

- The hearing aid should have enough power to allow your child to hear speech sounds.
- It should have Direct Audio Input (DAI) and microphone – telecoil (M-T) switching options. These options allow the hearing aid to be paired with other listening devices, such as FM systems.
- It should be flexible to make changes in tone, output and gain. This allows the audiologist to make adjustments to them as more information is learned about your child's hearing.
- It should have tamper-resistant battery doors. This is important because hearing aid batteries are toxic and can harm your child if swallowed.
- The hearing aid should have a microphone that is right for your child's listening needs.
 - **DIRECTIONAL MICROPHONES** pick up sounds coming from the front of your child.
 - **OMNI-DIRECTIONAL MICROPHONES** pick up signals from all directions. They can be more helpful for a child who is mobile.
 - **MULTIPLE MICROPHONES** will let you switch between omni and directional settings.
- It should have comfortable, customized earmolds.
 - Because young children grow very fast, the earmolds may need to be replaced every 3 to 6 months.
 - Earmolds will last longer for older children.
- Your audiologist can talk to you about other accessories for your child's hearing aids. Accessories include battery testers, dehumidifiers, hearing aid stethoscopes, safety clips, and volume control covers.

What is the Process for Getting Hearing Aids?

The process to fit your child with hearing aids will take a few weeks. This may seem like a long time, but several steps must happen first.

1. Your child must have approval, or “medical clearance” from an otolaryngologist to wear hearing aids. Medical clearance is required by law.
2. The audiologist must make impressions of your child’s ears. These impressions will be used to make custom earmolds for your child.
3. Your child must have a special measurement called the RECD (Real Ear to Coupler Difference) made with his earmolds in place. Your child's RECD measurement helps the audiologist adjust her hearing aids. The RECD measurement should be made before or at the time of the fitting of your child's hearing aids.
4. Sometimes, your child may have medical clearance and earmolds, but you may still be waiting for funding for the hearing aids. In these cases, your child’s audiologist may fit your child with a “loaner” hearing aid during the waiting period. This is because it is important that your child start wearing amplification as soon as possible.

Tips For Keeping Hearing Aids On Infants And Small Children

Keeping hearing aids on your small child can be a challenge, especially at first. As your child gets used to his hearing aids, and learns that he hears better with them on, it will get easier. Here are a few tips that can help:

- You should be in control of when and where your child wears the hearing aids. Make sure to teach your child that only adults are allowed to take off the hearing aids.
- Give your child reinforcement for wearing her hearing aids. Have a reward, such as a special toy or game that your child can only have with the hearing aids on.
- Little hands like to pull out hearing aids. Things such as Huggie Aids, alligator clips, hats and headbands can help keep the hearing aids on. Your audiologist can help you choose something that works for your child.

- Sometimes putting the earmold in your child's ear can be tricky. Using a special lubricant and having good technique can help. Your audiologist can teach you proper technique and help you get special lubricant. **(Use a water-based lubricant. Do not use Vaseline.)**
- Try to have your child wear the hearing aids whenever he is awake. This way, hearing sounds will become part of his daily routine. You may need to start with small amounts of time and build up to longer periods.

Issues You Might Encounter With Your Child's Hearing Aids

Be sure to talk with your audiologist if your child has any of the problems listed below, or if you have other questions about your child's hearing aids.

FEEDBACK

Feedback is a high-pitched squealing sound. Before turning down the volume to control feedback, be sure to talk to your audiologist. The hearing aid needs to be set at a certain volume to work best for your child. Talk to your audiologist if there are problems with feedback. Some causes of feedback can be:

- An earmold that is not inserted all the way into your child's ear.
- An earmold that fits poorly, or that your child has outgrown.
- An earmold, tubing or earhook that is damaged.
- A hat or blanket that covers the hearing aid and microphone (feedback will stop when you remove the hat or blanket).
- A hearing aid that is damaged.
- An earmold or an ear canal blocked by wax or discharge from an ear infection.

SORE SPOTS

Sometimes new earmolds may have some uneven areas that can cause redness or a sore spot in your child's ear. If this happens, your audiologist can often file the earmold smooth. Check your child's ears for redness whenever she gets new earmolds. A sore spot may be the reason your child does not want to wear her hearing aids.

EAR INFECTIONS

If your child has an ear infection she may not want to wear her hearing aids because her ears hurt. If you think your child has an ear infection, be sure to talk to your child's doctor or audiologist. They may recommend that your child doesn't wear her hearing aids until the infection clears. If your child's ears are actively draining, remove the hearing aids until the ear infection clears.

OVERAMPLIFICATION

Over amplification means that a hearing aid is too loud. Your audiologist should use a technique called real ear measures to find the settings that are appropriate for your child. If your child repeatedly pulls the hearing aids out of his ears, or blinks more than normal with his hearing aids on, they may be too loud. Loud sounds should be loud with hearing aids, but even very loud sounds should not cause discomfort for your child. Talk to your child's audiologist if you think he is being over amplified.

Cochlear Implants, FM Systems and Other Assistive Listening Devices

COCHLEAR IMPLANTS

You may have heard or read about cochlear implants. If you are interested in a cochlear implant for your child, talk to your audiologist or otolaryngologist (ENT doctor). They can tell you if a cochlear implant might be helpful. They can also help you find a pediatric cochlear implant program near you. Here are a few points about cochlear implants:

- A cochlear implant is surgically placed into your child's inner ear.
- Your child must have a severe to profound hearing loss to be considered for a cochlear implant.
- Not all children can have a cochlear implant.
- Your child must be at least one year old.
- Cochlear implant surgery eliminates any residual (remaining) hearing your child has in that ear.

- The implant does not correct hearing loss. It bypasses the normal auditory pathway (outer ear, middle ear, inner ear). It stimulates the auditory nerve directly. The brain then learns to interpret this electrical stimulation as speech.
- With proper follow-up therapy, a cochlear implant can help children with severe to profound hearing loss develop better speech and language skills.
- A cochlear implant “synthesizes” hearing of sounds. Your child will need training to learn to attach meaning to the sounds. This is called aural rehabilitation.

FM SYSTEMS

FM Systems make speech louder without making background sounds louder. This allows your child to hear the speaker’s voice better. This is especially helpful in places where there is a lot of background noise, such as at school or on the playground. If you think an FM system would be helpful for your child, talk to your audiologist. Your audiologist can either fit your child with an FM system or refer you to an audiologist who can. Here are a few points about FM systems:

- One person (the parent, therapist, or teacher) wears a microphone and transmitter.
- Your child wears a receiver.
- The microphone picks up the speaker’s voice.
- The speech sounds are sent to your child’s ears through radio waves.
- FM systems can be used alone, with hearing aids, or with cochlear implants.
- FM systems are helpful in the classroom or at home.
- FM systems are used when you want your child to be able to hear the speaker over background noise.

OTHER LISTENING DEVICES

Closed Captioning

This device can either be attached to a television or built into the television. It provides written text of the spoken words at the bottom of the television screen.

TTY

TTY stands for teletypewriter. You may also see it called a TDD (Telecommunications Device for the Deaf). A TTY allows a person with hearing loss to use a telephone by typing rather than speaking. A person using a TTY can call another TTY user direct, or use a relay service to call someone who does not have a TTY.

Telephone Amplifier

This device makes the telephone signal louder. It can be used with or without a hearing aid.

Alerting Devices

These devices can help alert your child of sounds such as the doorbell or telephone ringing. They might provide a visual signal, such as a flashing light, or a tactile signal, such as a pocket receiver that vibrates. Some of the most common devices used are alarm clocks, smoke alarms, door knockers, bed vibrators and phone flashers.

YOUR CHILD'S RIGHTS & YOUR RIGHTS AS A PARENT

This section will give you information about legal rights for you and your child. You will also learn about ways to help your child get the services he needs.

The Law & Your Rights

There are laws that guarantee you and your child certain rights. There are two brochures in the back pocket of this section that have information about your rights:

- ***A Family's Guide to Early Intervention Services in Washington State***
- ***Transition: A Time of Change – Growing Up: What happens as your child approaches three?***

On the next page are summaries of the information in each brochure. If you need help understanding any of the information in the brochures, or if you have more questions, talk to your Family Resources Coordinator (FRC). If you don't know who your FRC is, you can call Healthy Mothers Healthy Babies to find out: (800) 322-2588.

A FAMILY'S GUIDE TO EARLY INTERVENTION SERVICES IN WASHINGTON STATE.

This brochure has information about services available for children birth to three. You will learn about:

- The Individuals With Disabilities Education Act (IDEA).
- Your rights under IDEA.
- Eligibility for early intervention in Washington State.
- What services early intervention might include.
- Individualized Family Service Plan (IFSP).
- Contact information for organizations that can provide more help or information.

TRANSITION: A TIME OF CHANGE – GROWING UP: WHAT HAPPENS AS YOUR CHILD APPROACHES THREE?

Early intervention ends when your child turns three. This brochure has information about what happens as your child approaches three and transitions out of early intervention services. It has information about:

- What transition is.
- How to start planning for transition.
- Developing a transition plan.
- What services might be available for your child after early intervention ends.
- Individualized Education Program (IEP).
- How you can help your child and family make a smooth transition.
- Contact information for organizations that can provide more help or information.

Your Responsibilities as a Parent

Just as you have rights as the parent of a child with special needs, there are many ways you can help make sure your child's rights are respected and protected. These suggestions may be helpful:

LEARN AS MUCH AS YOU CAN ABOUT YOUR RIGHTS AND THE RIGHTS OF YOUR CHILD

The more you know about your rights under federal law, the better you can make sure your child's school is honoring them. If you have any questions about your rights as a parent, ask your Family Resources Coordinator, school or educational agency.

BECOME A PARTNER WITH YOUR CHILD'S PRESCHOOL, SCHOOL, OR EDUCATION AGENCY

Because you know your child better than anyone, you are a key member of a team whose job it is to help your child get the best education possible. Your input is an important resource to the educators and other professionals who work with your child.

UNDERSTAND THE PROGRAM IN YOUR CHILD'S IFSP OR IEP

Ask questions until you are sure you understand. Don't sign the IFSP or IEP until you are sure you understand all of it.

KEEP TRACK OF YOUR CHILD'S PROGRESS

If your child is not progressing as well as you think he should, talk with his teacher or providers. You have the right to ask for a review of your child's educational program at any time.

KEEP RECORDS

Each year, keep a notebook to write down questions or comments about your child's progress or educational program. Take notes whenever you meet with staff, talk on the phone, or send notes to teachers or other staff. Write down dates, times, what happened, and the names of the people involved. These notes can be a helpful reminder for you and for your child's educators.

TALK WITH YOUR CHILD'S SCHOOL OR AGENCY WHEN YOU HAVE CONCERNS

It is important to make sure that the professionals who work with your child understand your concerns. Often, problems can be easily resolved once your concerns are made known.

RESOURCES

There are many resources to help you learn more about hearing loss and treatment options. We have only listed some of the resources available. Your audiologist or Family Resources Coordinator can also help you find more resources and programs to fit your needs.

In this section you will find details about:

- How to contact your Family Resources Coordinator (FRC).
- Early Intervention programs that specialize in working with children with hearing loss and their families.
- Schools for children with hearing loss.
- Useful websites and organizations.
- Audiologists who evaluate and treat infants and young children with hearing loss.

Contacting Your Family Resources Coordinator

Contacting your Family Resources Coordinator (FRC) is one of the first steps you will need to take in helping your child. Family Resources Coordinators are located in each county or geographic area. Your Family Resources Coordinator will help your family get the early intervention services your child needs.

Contact your FRC as soon as possible, if you haven't already. If you do not know who your Family Resources Coordinator is, call Healthy Mothers, Healthy Babies at (800) 322-2588. You will be given the contact information for the Lead FRC in the county you live in. You can also visit the Healthy Mothers, Healthy Babies website at www.hmhbwa.org.

Early Intervention Programs That Specialize in Hearing Loss

The following list contains Early Intervention programs in Washington State that specialize in working with children who are deaf or hard of hearing and their families. The staff of these programs have special training, and are experts in working with children with hearing loss. Talk to your Family Resources Coordinator (FRC) if you need help contacting one of these programs. There may also be other programs in your area that have staff members specially trained to work with children with hearing loss and their families. You can contact your FRC for a current list of programs.

FAMILY CONVERSATIONS

- Provides home-based specialized instruction that helps parents understand their child's strengths and needs related to communication.
- Helps parents learn ways to support language development through listening, speaking and signing.
- The child, parents, brothers, sisters, and extended family can join in weekly playgroups, parent education, Signing Exact English classes and informal support groups.
- Family Conversations serves children and their families throughout Western Washington up to age 3.

Children's Hospital & Regional Medical Center
(206) 987-5147 (voice) / (206) 987-2788 (TTY)

web site: www.seattlechildrens.org/audiology

LISTEN AND TALK

- Auditory-verbal program serving families throughout Washington.
- Your child must use a hearing aid or cochlear implant to be in this program.
- Listen and Talk provides families with individual therapy sessions, parent support groups, and children's playgroups.
- It also provides individual therapy and mainstream services for older children.

Listen and Talk

(425) 483-9700

e-mail: hear@listentalk.org

website: www.listentalk.org

SEATTLE PARENT INFANT PROGRAM (PIP)

- Family-centered program for children from birth to 3 years of age, serving families in King and Snohomish counties.
- This program offers a bilingual/bicultural approach to meet each family's needs.
- Seattle Parent Infant Program offers home visits, playgroups, parent support groups, counseling, and American Sign Language classes.

Parent Infant Program, Hearing Speech and Deafness Center

(206) 323-5770 (voice/TTY)

website: www.HSDC.org

TACOMA PARENT INFANT PROGRAM

- Provides services using total communication for children from birth to 3 years of age and their families who live in the Tacoma School District. It may also be an option for other families living in Pierce County.
- Services include home visits, play groups, parent groups, and one-on-one communication therapy sessions.

Parent Infant Program, Birney Elementary School

(253) 571-2060 (Voice/TTY)

WASHINGTON SCHOOL FOR THE DEAF – FAMILY INFANT TODDLER PROGRAM

- Family-focused program designed to meet the broad needs of children, parents and family members who live in Clark, Cowlitz and Skamania counties.
- Provides support and resources for families in a variety of natural environments.

- Services include: understanding the impact of hearing loss, parent infant home visits, family support groups, play groups that focus on language and social skills, exposure to a variety of communication options, and access to adult and peer deaf role models.

Washington School for the Deaf

611 Grand Blvd.

Vancouver, WA 98661

(360) 696-6525 (voice) / (360) 418-4366 (TTY)

website: www.wsdeaf.wednet.edu

YAKIMA VALLEY HEARING AND SPEECH CENTER

PARENT-INFANT-TODDLER PROGRAM

- This program serves families in the upper and lower Yakima Valley, Tri-Cities area, Ellensburg and Goldendale.
- Individualized therapy, counseling, and parent participation are key to success.
- Includes teaching about spoken language, sign language, lip reading, auditory training and amplification devices.
- Parents use the communication method of their choice. Services are provided in the family's primary language.
- Works closely with doctors, school districts and other professionals to provide ongoing services.

Nancy Frame

Hearing and Speech Center

303 South 12th Avenue

Yakima, WA 98902

(509) 453-8248

School for Children with Hearing Loss

PUBLIC SCHOOL

If your child is over 3 years of age, contact your local school district to find out what options it offers for children with hearing loss. By law, any child with a hearing loss and a need for services is entitled to special education services. Your child may qualify for services such as speech therapy or a specialized classroom for children with hearing loss. You will work with staff from your school district to develop an individualized education program (IEP) for your child. Your audiologist can provide you with more information and help you explore your options and other resources.

RESIDENTIAL SCHOOL

The Washington School for the Deaf (WSD) is a residential state school, located in Vancouver, WA. WSD provides classes for students in preschool through high school. Students who attend WSD live on campus.

WASHINGTON SCHOOL FOR THE DEAF

611 Grand Blvd.

Vancouver, WA 98661

(360) 696-6525 (voice) / (360) 418-4366 (TTY)

website: www.wsdeaf.wednet.edu

Private Schools

LISTEN AND TALK

(programs for children ages 3 – 5 years)

20302 Bothell Way NE

Bothell, WA 98011

(425) 483-9700

e-mail: hear@listentalk.org

website: www.listentalk.org

NORTHWEST SCHOOL FOR HEARING IMPAIRED CHILDREN

(programs for children ages 3 – junior high)

P.O. Box 31325

Seattle, WA 98103

(206) 364-4605

SPOKANE HOPE SCHOOL (HEARING ORAL PROGRAM OF EXCELLENCE)

(programs for children birth – 5 years)

University Hearing & Speech Clinic

JoBeth Deibel

310 N. Riverpoint

Spokane, WA 99202-1675

(509) 368-6899

Websites

The following websites are good resources for your family. This list only contains a small number of the websites available. You will find many other websites when you search the Internet.

If you do not have Internet access at home, check with your local library. Most libraries now offer free access to the Internet and training on how to use a computer.

NOTE: The inclusion of any web site or resource through a link does not imply endorsement by the Washington State Department of Health's Early Hearing Loss Detection, Diagnosis and Intervention Program. Seek the advice of your child's health care provider before you act or rely upon any information from these resources.

BABYHEARING.ORG

<http://babyhearing.org/>

Babyhearing.org was developed by a team of professionals comprised of audiologists, speech-language Pathologists, teachers of the deaf, geneticists, doctors and parents of

deaf and hard of hearing children at Boys Town National Research Hospital in Nebraska. It has a wealth of information about newborn hearing screening and infant hearing loss.

INFANT TODDLER EARLY INTERVENTION PROGRAM (ITEIP)

<http://www1.dshs.wa.gov/iteip/>

The Infant Toddler Early Intervention Program (ITEIP) provides early intervention services, including Family Resources Coordination, for eligible children from birth to age 3 and their families. ITEIP, part of the Department of Social and Health Services (DSHS) Division of Developmental Disabilities (DDD), implements the Individuals with Disabilities Education Act (IDEA), Part C in Washington State.

WASHINGTON SENSORY DISABILITIES SERVICES (WSDS)

<http://www.wsdsonline.org/>

Washington Sensory Disabilities Services is an OSPI (Office of the Superintendent of Public Instruction) funded state needs project which provides information, training, technical assistance, and resources to families and educators statewide about children and youth with sensory disabilities – students who are deaf/hard of hearing, blind/visually impaired, or deaf-blind.

AMERICAN SPEECH-LANGUAGE-HEARING ASSOCIATION (ASHA)

<http://www.asha.org/default.htm>

ASHA is the professional, scientific, and credentialing association for **more than 114,000 members and affiliates** who are speech-language pathologists, audiologists, and speech, language, and hearing scientists in the United States and abroad. The mission of ASHA is to promote the interests of and provide the highest quality services for professionals in audiology, speech-language pathology, and speech and hearing science, and to advocate for people with communication disabilities.

HANDS & VOICES

<http://handsandvoices.org/>

Hands & Voices is a parent-driven, non-profit organization that provides unbiased support to families with children who are deaf or hard of hearing. They provide support activities and information about deaf and hard of hearing issues to parents and professionals that may include outreach events, seminars, advocacy, lobbying efforts, parent-to -parent networking, and a newsletter. Hands & Voices strives to connect families with resources and information to make informed decisions around the issues of deafness or hearing loss.

BEGINNINGS FOR PARENTS OF CHILDREN WHO ARE DEAF OR HARD OF HEARING

<http://www.beginningssvcs.com>

BEGINNINGS was established to provide emotional support and access to information as a central resource for families with deaf or hard of hearing children, ages birth through 21. The mission of BEGINNINGS is to help parents be informed, empowered and supported as they make decisions about their child.

ALEXANDER GRAHAM BELL ASSOCIATION FOR THE DEAF AND HARD OF HEARING (AG BELL)

<http://www.agbell.org/>

The Alexander Graham Bell Association for the Deaf and Hard of Hearing (AG Bell) is a lifelong resource, support network, and advocate for listening, learning, talking and living independently with hearing loss. Through publications, outreach, training, scholarships and financial aid, AG Bell promotes the use of spoken language and hearing technology. Based in Washington, DC with chapters throughout the United States and Canada and a network of international affiliates, AG Bell's global presence provides its members and the public with the support they need close to home. With over a century of service, AG Bell supports its mission: Advocating Independence through Listening and Talking.

PARENT TO PARENT

<http://www.arcwa.org/parent2parent.htm>

A support network for parents of children with disabilities. Services offered include local county coordinators, emotional support for parents of children with disabilities, presentations to parent groups, professionals, and other organizations, and information on disabilities, community resources for the child and family, parent support meetings, trainings for parents who want to become a Helping parent volunteer.

NATIONAL CENTER FOR HEARING ASSESSMENT & MANAGEMENT (NCHAM)

<http://www.infanthearing.org>

In 1995, the National Center for Hearing Assessment and Management (NCHAM) was established at Utah State University. NCHAM assists hospital-based Universal Newborn Hearing Screening and state-based Early Hearing Detection and Intervention (EHDI) programs in their efforts to ensure that all infants are screened for hearing loss at birth, and that infants who refer from screening receive timely and appropriate diagnostic and intervention services. It receives funding from federal, state, and private sources to conduct research, develop training materials, provide training and technical assistance, and provide information about early identification and management of hearing loss. Their website contains a wealth of information about newborn hearing screening and follow-up. It also includes a bulletin board, and statistics and contact information for every state.

NATIONAL ASSOCIATION OF THE DEAF (NAD)

<http://www.nad.org>

The mission of the National Association of the Deaf is to promote, protect, and preserve the rights and quality of life of persons who are deaf and hard of hearing individuals in the United States. This website provides information about legal rights, advocacy issues, frequently asked questions, news and outreach.

AMERICAN ACADEMY OF PEDIATRICS (AAP)

<http://www.aap.org/>

The AAP is an organization of 60,000 pediatricians committed to the attainment of optimal physical, mental, and social health and well-being for all infants, children, adolescents, and young adults. The AAP website contains general information for parents of children from birth through age 21. This website contains information about the Academy's many programs and activities, their policy statements and practice guideline, and publications and other child health resources.

WASHINGTON STATE DEPARTMENT OF HEALTH

<http://www.doh.wa.gov/ehddi>

The Early Hearing Loss Detection, Diagnosis and Intervention (EHDDI) Program is housed in the Genetic Services Section of the Washington State Department of Health. The program is funded through two cooperative agreements with the Center for Disease Control and Prevention (CDC) and the Human Resources and Services Administration (HRSA), as well as general fund state dollars. The main goals of the EHDDI program are to ensure that all infants born in the state of Washington are screened for hearing loss before hospital discharge or by one month of age, that they receive diagnostic audiological assessment by three months of age if needed, and that they are enrolled in early intervention services by six months of age or earlier, if the infant is found to have a hearing loss.

CHILDREN'S HOSPITAL & REGIONAL MEDICAL CENTER

<http://www.newborn-hearing-screening.org>

Children's Hospital & Regional Medical Center is working in partnership with the Northwest Lions Foundation for Sight & Hearing, Washington State Department of Health, and Washington Chapter of the American Academy of Pediatrics to implement Universal Newborn Hearing Screening Programs that are linked with appropriate follow-up care throughout Washington.

NORTHWEST LIONS FOUNDATION FOR SIGHT & HEARING

<http://www.nlfoundation.org/hearing/index.htm>

The Northwest Lions Foundation for Sight & Hearing has six different programs to accomplish its mission of protecting and restoring hearing. These programs include: Lions Affordable Hearing Aid, Lions Hearing Aid Bank, Lions Early Assessment Program (LEAP), Lions Health Screening Unit, Lions Patient Care Program and Lions Special Project Grants.

Audiologists who Evaluate and Treat Infants and Young Children with Hearing Loss

PEDIATRIC AUDIOLOGY SERVICES GUIDE

The following clinics have indicated they meet the requirements of the Washington State Department of Health Protocol for Diagnostic Audiological Assessment of Infants Referred from Universal Newborn Hearing Screening Programs.

Western Washington

Audiological Clinic
505 NE 87th Ave, Suite 150
Vancouver, WA 98664
Phone: 360-892-9367
Fax: 360-253-3801

Children's Hospital & Regional Medical Center
PO Box 5371, MS CH-78,
Audiology
Seattle, WA 98105
Phone: 206-987-5173
Fax: 206-987-3878

Children's Bellevue, Audiology
1135—116th Ave., Suite 400
Bellevue, WA 98004
Phone: 425-454-4644
Fax: 425-451-0214

Evergreen Speech & Hearing Svcs
1800—116th Ave., Suite 103
Bellevue, WA 98683
Phone: 425-454-1883
Fax: 425-454-2036

Evergreen Speech & Hearing Clinic
12333 NE 130th Lane, #430
Kirkland, WA 98034
Phone: 425-899-5050
Fax: 425-899-5054

Madigan Army Medical Center
Audiology Clinic
*serves Military families only
MCHJ SET-A
Tacoma, WA 98431
Phone: 253-968-0927

Mary Bridge Speech & Hearing Services
Mary Bridge Children's Hospital
1220 Division
Tacoma, WA 98403-1321
Phone: 253-403-1450
Fax: 253-627-5004

University of Washington
Pediatric Audiology Clinic
Center for Human Development & Disability
PO Box 357920
Seattle, WA 98195
Phone: 206-685-4692
Fax: 206-543-5771

Virginia Mason Medical Center
Audiology
1100 Ninth Avenue
PO Box 900
Seattle, WA 98111
Phone: 206-223-8802
Fax: 206-223-2388

Western Washington University
Speech & Hearing Clinic
516 High Street, MS 9078
Bellingham, WA 98225-3881
Phone: 360-650-3881
or 360-650-3198
Fax: 360-650-2843

Eastern Washington

Hearing & Speech Center
303 South 12th Ave.
Yakima, WA 98902
Phone: 509-453-8248
Fax: 509-248-9012

Walla Walla Clinic
320 Willow
Walla Walla, WA 99362
Phone: 509-525-3720
Fax: 509-529-9939

Holy Family Hospital
Speech & Hearing Center
5628 N Division, Suite D1
Spokane, WA 99208
Phone: 509-482-2193
Fax: 509-482-2196

Spokane Audiology Clinic
Deaconess Medical Office Bldg
801 W 5th, Suite 112
Spokane, WA 99204
Phone: 509-835-5111
Fax: 509-835-5222

Spokane Ear, Nose & Throat Clinic
217 W Cataldo
Spokane, WA 99201
Phone: 509-624-2326
Fax: 509-789-5705

Spokane Ear, Nose, & Throat, PS
Valley Medical Center
1414 N Houk Road, Suite 208
Spokane, WA 99216
Phone: 509-928-7272
Fax: 509-928-7346

University Hearing & Speech Clinic
University Programs in Communication Disorders
Health Sciences Building
310 N Riverpoint Blvd
Spokane, WA 99202
Phone: 509-358-7587
Fax: 509-368-6890

This list is provided for convenience only and was prepared in collaboration with Children's Hospital & Regional Medical Center. The Department of Health does not endorse the professionals on this list and can not make any guarantees regarding quality of care.

For questions regarding the Pediatric Audiology Services Guide, please contact:

Washington State EHDDI Program
Phone 206-418-5613
Fax: 206-418-5415
Email: ehddi2@doh.wa.gov

Esther Ehrmann, EHDDI Project Coordinator
Phone: 206-987-2457 or 888-365-7767
Fax: 206-987-2686
Email: esther.ehrmann@seattlechildrens.org